#### KEEGAN, WERLIN & PABIAN, LLP

ATTORNEYS AT LAW
265 FRANKLIN STREET
BOSTON, MASSACHUSETTS 02110-3113

TELECOPIERS: (617) 951-1354 (617) 951-0586

(617) 951-1400

DAVID S. ROSENZWEIG E-mail: drosen@kwplaw.com

April 5, 2004

Mary Cottrell, Secretary
Department of Telecommunications and Energy
One South Station, 2<sup>nd</sup> Floor
Boston, Massachusetts 02110

Re: NSTAR Electric, D.T.E. 03-121

Dear Secretary Cottrell:

Enclosed for filing in the above-referenced case, please find NSTAR Electric's supplemental response to Information Request DOER-1-1 (Supp). In addition, on Friday, April 2, 2004, NSTAR Electric filed a second supplemental response to Information Request AG-1-19. However, the response was inadvertently identified: (1) in the cover letter accompanying the response; and (2) in the electronic filing related to the responses, as Information Request AG-1-2 (Supp 2). Please note for the record that the response filed to Information Request AG-1-19 (Supp 2) was correct and that only the cover letter reference was incorrect.

Thank you for your attention to this matter.

Very truly yours

David S. Rosenzweig

**Enclosures** 

cc: William Stevens, Hearing Officer
John Cope-Flanagan, Hearing Officer
Service List

# COMMONWEALTH OF MASSACHUSETTS DEPARTMENT OF TELECOMMUNICATIONS AND ENERGY

Boston Edison Company Cambridge Electric Light Company Commonwealth Electric Company d/b/a NSTAR Electric	) ) ) )	D.T.E. 03-121
	<i></i> )	

#### **CERTIFICATE OF SERVICE**

I certify that I have this day served the foregoing documents upon the service list in the above-docketed proceeding in accordance with the requirements of 220 C.M.R. 1.05.

Erika J. Hafner, Esq.

Keegan, Werlin & Pabian, LLP

265 Franklin Street Boston, MA 02110 (617) 951-1400

Dated: April 5, 2004

## Response to Information Request

Information Request DOER-1-1 (Supplement)

**NSTAR Electric** 

Department of Telecommunications and Energy

D.T.E. 03-121

Information Request: DOER-1-1 (Supp)

April 5, 2004

Person Responsible: Henry C. LaMontagne

Page 1 of 1

#### **Information Request DOER-1-1**

Please provide a copy of each and every report submitted to the Department beginning with the year-1997, for the Department's Annual Report Concerning Self-Generation. Please provide all related information used to produce those reports, including Company e-mails, memos, minutes, agendas, calculations, or other notes created in preparation for or during Company meetings.

#### Supplemental Response

Please see Attachment DOER-1-1 (Supp) for the Company's Annual QF Report for calendar year 2003. Please note that the attachment does not include the names and addresses of the customers in order to protect the privacy interests of those customers.

#### KEEGAN, WERLIN & PABIAN, LLP

ATTORNEYS AT LAW
265 FRANKLIN STREET
BOSTON, MASSACHUSETTS 02110-3113

TELECOPIERS: (617) 951-1354 (617) 951-0586

(617) 951-1400

April 1, 2004

Ronald LeComte, Director Electric Power Division Department of Telecommunications and Energy One South Station, 2<sup>nd</sup> Floor Boston, MA 02110

Dear Mr. LeComte:

In compliance with 220 C.M.R. § 8.07, Boston Edison Company, Cambridge Electric Light Company and Commonwealth Electric Company (the "Companies") hereby file with the Department of Telecommunications and Energy ("Department") a report of Qualifying Facility and On-Site Generating Facility activity during calendar year 2003. Customer names and addresses have been redacted to protect the privacy of the Companies' customers. Consistent with the Department's regulations, the first portion of the filing includes:

- a) The name and address of the owner, and the address where the Qualifying Facility ("QF") or On-Site Generating Facility is located;
- b) A brief description of the type of QF or On-Site Generating Facility;
- c) The primary energy source used by the QF or On-Site Generating Facility;
- d) The date of installation and on-line date:
- e) The method of delivering power to the Distribution Company (contract or net metering);
- f) The design capacity of the QF or On-Site Generating Facility; and
- g) A brief discussion identifying any QF or On-Site Generating Facility that was denied interconnection by the Distribution Company, including a statement of reasons for such denial.

In response to parts (a) through (f) above, please see Attachment A for a listing of customer facilities and estimated incremental reductions in purchases for the Companies during 2003. In response to part (g), the following QFs or On-Site Generating Facilities

were denied interconnection by the Companies for the reasons referenced below:

#### • [REDACTED]

A spot network serves the customer as well as multiple other customers. The protection scheme submitted did not solve the known issues of distributed generation ("DG") on a spot network. In addition any degradation of service would affect not only the requesting customer, but also neighboring customers being fed by the same spot network.

#### • [REDACTED]

The Area Network serves both of these sites. The protection scheme submitted did not solve the known issues of DG on an Area Network.

#### • [REDACTED]

The Area Network serves this site. The protection scheme submitted did not solve the known issues of DG on an Area Network.

#### • [REDACTED]

A spot network serves this site. The protection scheme submitted did not solve the known issues of DG on a spot network.

### • [REDACTED]

A spot network serves this site. The protection scheme submitted did not solve the known issues of distributed generation on a spot network.

Also, as required by the Department's regulations, the second portion of the filing describes the incremental reductions in the purchases of electricity during calendar year 2003 because of customer operations of, or purchases from, On-Site Renewable Technologies; Fuel Cells; Cogeneration Equipment; On-Site Generating Facilities eligible for net metering; or Cogeneration Facilities of 60 kilowatts ("kW") or less that are eligible for net metering. Consistent with this requirement, the second portion of the filing includes:

- a brief description of the incremental reductions in purchases of electricity during the calendar year because of customer operations of:
  - On-Site Renewable Energy Technologies;
  - Fuel Cells;

- Cogeneration equipment with a combined heat and power system efficiency of at least 50 percent based on the higher value of the fuel used in the system;
- On-Site Generation Facilities eligible for net metering; or
- Cogeneration Facilities of 60 kW or less that are eligible for net metering.
- 2) A brief discussion of the effect of 220 CMR § 8.07(2)(a) on the Distribution Company's transition charge, including a quantitative estimate of the lost dollar contribution to the Distribution Company's transition charge during the calendar year;
- 3) A brief discussion of the effect of 220 CMR § 8.07(2)(a) on the Distribution Company's kilowatthour sales during the calendar year;
- 4) An estimate of the percent of the Distribution Company's gross annual revenues that have been lost during the calendar year because of net metering; and
- 5) A brief narrative identifying all customers that have given notice to the Distribution Company of their plans to reduce electricity purchases.

In response to the above-referenced items, please refer to Attachment B for a listing of customer facilities that have given notice and estimated incremental reductions in purchases for the Companies.

Thank you for your attention to this matter. Please contact me if you have any questions regarding the filing.

Sincerely,

Shuk. Halub

John K. Habib

**Enclosures** 

cc:

Bob Harrold Frank Gundal

Tam Ly

Reporting Period: January 1, 2003 through December 31, 2003

Customer	Service Address	Facility	Energy	Installation	Online	Delivery	Design Cap.	Estimated	Estimated	Estimated	Estimated
		Туре	Source	Date	Date	Method	(kW)	Annual Run Hrs (1)	Lost kWh (2)	Impact On Transition (3)	Impact On T&D Rev. (4)
Boston Edison Compai	ny					<b> </b>				Translation (e)	1001(01.(4)
		Cogen > 1 MW	Dual Fuel	1978	1978	Contract	5,000.0	2610	13,050,000	\$ 182,309	\$ 555,017
		Cogen > 1 MW	Diesel	N/A		Net	1,800.0	900	1,620,000	\$ 22,631	\$ 68,899
		Cogen > 1 MW	Dual Fuel	1972	1973	Net	10,000.0	7100	71,000,000		\$ 3,019,630
		Cogen > 1 MW	Jet Fuel	1992	1995		52,000.0	500	26,000,000		\$ 1,105,780
		Cogen > 1 MW	Nat Gas	1994	1994		2,400.0	8100	19,440,000	\$ 271,577	\$ 826,783
		Cogen 60kW-1 MW	Nat Gas	1984	1985		600.0	8000	4,800,000		\$ 204,144
		Cogen 60kW-1 MW	#6 Fuel Oil	1987	1987		225.0	7500			\$ 71,769
		Cogen 60kW-1 MW Cogen 60kW-1 MW	Nat Gas	N/A		Net	75.0	4500	337,500	\$ 4,715	
		Cogen 60kW-1 MW	Nat Gas Natural Gas	1986	1986		105.0	5840	613,200		\$ 26,079
		Cogen 60kW-1 MW	Natural Gas	1982 1982	1986 1986		75.0	0	-	\$ -	\$ -
		Cogen 60kW-1 MW	Natural Gas	1985	1986		75.0	0	•	\$ -	\$ -
		Cogen 60kW-1 MW	Natural Gas	1986		Contract	75.0 200.0	0	-	\$ -	\$ -
		Cogen 60kW-1 MW	Natural Gas	1989		Contract	600.0	3428	2 056 900	\$ - ¢ 00.700	\$ -
		Cogen 60kW-1 MW	Natural Gas	1989		Contract	60.0	4260		\$ 28,733	\$ 87,476
		Cogen 60kW-1 MW	Natural Gas	1989		Contract	60.0	4000	255,600 240,000	\$ 3,571 \$ 3,353	\$ 10,871 \$ 10,207
		Cogen 60kW-1 MW	Natural Gas	2001	2001		75.0	3400	255,000		\$ 10,207
		Cogen 60kW-1 MW	Natural Gas	2001	2001		75.0	3400	255,000		\$ 10,845
		Cogen 60kW-1 MW	Natural Gas	2001	2001		75.0	7800		\$ 8,172	\$ 24,880
		Fuel Cell	Methane Gas	1997	1998		200.0	7000			\$ 59,542
		Fuel Cell	Natural Gas	1995	1995	Net	200.0	8752	1,750,400		\$ 74,445
		Hydroelectric	Run-of-river	N/A	1991	Contract	125.0	1313	164,125		
		Photovoltaic	Solar	2000	2000		28.0	1250	35,000		\$ 1,489
		Photovoltaic	Solar	2001	2001		0.5	1250	625		\$ 27
		Steam turbine	Steam	2000	2000		75.0	3000	225,000	\$ 3,143	\$ 9,569
		Photovoltaic	Solar	2002	2002		3.3	1250	.,	\$ 58	
		Photovoltaic	Solar	2002	2002		5.4	1250	6,750		
		Photovoltaic Photovoltaic	Solar	2002	2002		2.0	1250	2,500		\$ 106
		Photovoltaic	Solar Solar	2002	2002		5.0	1250	6,250		
		Cogen 60kW-1 MW	Nat Gas	2002 2002	2002 2002		20.0	1250			\$ 1,063
		Photovoltaic	Solar	1999	1999		70.0	4000		\$ 3,912	•
		Cogen 60kW-1 MW	Nat Gas	2002	2003		4.8 60.0	1400	6,720		•
		Cogen 60kW-1 MW	Nat Gas	2002	2003		60.0	8322 8322			\$ 21,236
		Photovoltaic	Solar	10/9/2003	10/9/2003		30.0	1400			\$ 21,236 \$ 1,786
		Photovoltaic	Solar	4/15/2003	4/15/2003		2.2	1400	•		\$ 1,786 \$ 130
		Photovoltaic	Solar	5/5/2003	5/5/2003		2.2	1400			\$ 130
		Photovoltaic	Solar	5/15/2003	5/15/2003		2.2	1400			\$ 130
		Photovoltaic	Solar	5/15/2003	5/15/2003		2.1	1400			\$ 124
		Photovoltaic	Solar	6/3/2003	6/3/2003	Net	3.0	1400			\$ 180
		Photovoltaic	Solar	6/25/2003	6/25/2003	Net	2.2	1400			\$ 130
		Photovoltaic	Solar	5/21/2003	5/21/2003		2.1	1400			\$ 124
		Photovoltaic	Solar	8/13/2003	8/13/2003		1.2	1400		\$ 23	\$ 71
		Photovoltaic	Solar	7/11/2003	7/11/2003		2.4	1400			\$ 143
		Photovoltaic	Solar	7/11/2003	7/11/2003		2.5	1400			\$ 149
		Photovoltaic	Solar	7/11/2003	7/11/2003		2.5	1400			\$ 149
		Cogen 60kW-1 MW	Nat Gas	7/21/2003	7/21/2003		250.0	8560			\$ 91,014
		Photovoltaic Photovoltaic	Solar	10/21/2003	10/21/2003		2.2	1400			\$ 130
		Photovoltaic Photovoltaic	Solar Solar	9/12/2003 8/18/2003	9/12/2003		1.4	1400			\$ 83
		Photovoltaic Photovoltaic	Solar	12/8/2003	8/18/2003		1.8	1400		\$ 34	
		Photovoltaic	Solar	11. 1	12/8/2003		10.0	1400	,	\$ 196	
		I motovoitaic	Journ	9/11/2003	9/11/2003	Met	2.4	1400	3,360	\$ 47	\$ 143

#### Reporting Period: January 1, 2003 through December 31, 2003

	Photovoltaic	Solar	10/7/2003	10/7/2003 Net	2.2	1400	3,049	43	\$	130
	Cogen 60kW-1 MW	Nat Gas	11/1/2003	11/1/2003 None	250.0	8460			7	89.95
	Photovoltaic	Solar	9/23/2003	9/23/2003 Net	1.0	1400		,		6
	Photovoltaic	Solar	9/30/2003	9/30/2003 Net	2.2	1400				13
	Photovoltaic	Solar	9/30/2003	9/30/2003 Net	2.2	1400	-1 1		. •	13
	Photovoltaic	Solar	10/8/2003	10/8/2003 Net	2.4	1400	-1 1		•	14
	Photovoltaic	Solar	12/19/2003	12/19/2003 Net	2.4	1400	-,   ,		•	14
	Photovoltaic	Solar	12/19/2003	12/19/2003 Net	1.2	1400	-,			7
	Photovoltaic	Solar	]		'		,,555		\$	
	Photovoltaic	Solar	12/5/2003	12/5/2003 Net	2.4	1400	3,326	46	\$	14
	Photovoltaic	Solar	12/19/2003	12/19/2003 Net	4.8	1400				28
	Photovoltaic	Solar	11/25/2003	11/25/2003 Net	2.4	1400	3,360		\$	14
al	 				75,019.7		151,475,709		\$ 6	6,442,26

Customer	Service Address	Facility Type	Energy Source	Installation Date	Online Date	Delivery Method	(kW)	Estimated Annual Run Hrs (1)	Estimated Lost kWh (2)	Estimated Impact On Transition (3)	Estimated Impact On T&D Rev. (4)
Cambridge Electric Li	ght			•		1					
		Cogen > 1 MW Photovoltaic Photovoltaic Photovoltaic Photovoltaic	Nat Gas Solar Solar Solar Solar	6/1/1994 11/15/1999 6/1/1999 7/25/2003 11/19/2003	7/1/1995 11/23/1999 6/1/1999 7/25/2003 11/19/2003	Net Net	21,500.0 18.0 6.0 20.0 2.4	6047 1250 1250 1400 1400	130,010,500 22,500 7,500 28,000 3,360	\$ 325 \$ 108 \$ 405	\$ 648 \$ 216
Total							21,546.4		130,071,860	\$ 1,879,538	

Customer	Service Address	Facility Type	Energy Source	Installation Date	Online Date	Delivery Method	Design Cap. (kW)	Estimated Annual Run Hrs (1)	Estimated Lost kWh (2)	Estimated Impact On Transition (3)	Estimated Impact On T&D Rev. (4)
Commonwealth Electi	ric							.,			102101.(4)
Commonweatth Electi	ite	Cogen < 60kW Cogen	Nat Gas #2 Fuel Oil Propane #2 Fuel Oil Nat Gas #2 Fuel Oil Wat Gas #2 Fuel Oil #3 Fuel Oil #4 Gas Nat Gas Nat Gas Natural Gas Solar Solar Solar Solar Solar	10/22/1997 9/1/1996 5/20/1998 5/5/1995 11/1/1998 7/30/1996 1/31/1997 11/15/1997 12/2/1996 8/8/1996 3/10/1992 12/26/1995 11/16/1994 3/1/1993 5/17/1991 1999 6/19/1996 11/1/1998 10/15/1998 10/15/1998 10/16/2000 10/16/2001	8/19/1998 12/15/1999 11/11/1998 11/15/1997 3/15/2000 10/16/2001	Net	5.0 5.0 5.0 5.0 5.0 5.0 5.0 5.0 5.0 5.0	0 1000 486 1000 0 1000 1000 1000 1000 397 8712 500 8229 1250 1250 1250 1250	2,430 5,000 - 5,000 - 1,260 - 5,000 5,000 1,985 9,147,600 75,000 1,645,800 2,500 2,500 2,500 2,500 1,250 300	\$ 151 \$ - \$ 151 \$ - \$ 38 \$ - \$ 151 \$ 151 \$ 276,989 \$ 2,271 \$ 49,835 \$ 76 \$ 76 \$ 76 \$ 38 \$ 9	\$ 109 \$ 109 \$ 109 \$ 109 \$ 55 \$ 13
		Water Turbine	Hydro	3/1/1983	4/4/1983 3/1/1983		15.0 7.0	1618 0	24,270 -	\$ 735 \$ -	\$ 1,059 \$ -

#### Reporting Period: January 1, 2003 through December 31, 2003

	Water Turbine	Hydro	N/A	12/1/1982 Contract	225.0	1300	292,500	\$ 8,857	s	12,759
	Wind Mill	Wind	N/A	11/1/1983 Net	7.5	o		\$ -	Š	12,70
	Cogen 60kW-1 MW	Nat Gas	2002	6/24/1905 Net	60.0	4000	240,000	\$ 7,267	\$	10,46
	Fuel Cell	Nat Gas	7/8/2003	7/8/2003 None	200.0	8760	1,752,000		Š	76.42
	Photovoltaic	Solar	4/3/2003	4/3/2003 Net	4.0	1400	5,600			24
	Photovoltaic	Solar	5/21/2003	5/21/2003 Net	1.8	1400	2,520			1
	Photovoltaic	Solar	5/21/2003	5/21/2003 Net	1.2	1400	1,610		,	•
	Photovoltaic	Solar	5/21/2003	5/21/2003 Net	0.9	1400				
	Photovoltaic	Solar	5/21/2003	5/21/2003 Net	1.1	1400	1,596		*	
	Photovoltaic	Solar	5/21/2003	5/21/2003 Net	1.1	1400	1,604		•	
	Photovoltaic	Solar	5/21/2003	5/21/2003 Net	1,1	1400	1,604		\$	
	Photovoltaic	Solar	12/1/2003	12/1/2003 Net	5.0	1400	7,000	212	Š	30
al					2,010.0		13,247,190			577.8

#### Notes

- 1. Estimated Annual Run Hours supplied by customer if available or best estimate.
- 2. Lost kWh estimated by taking the Design Capacity (kW) and multipling it by the Annual Run Hours supplied by the Customer.
- Impact on Transition estimated by multiplying the lost kWh by the Average Transition Rate of the appropriate operating company.
   Impact on Revenue estimated by multiplying the lost kWh by the Average Distribution and Transmission Rate of the appropriate operating company.

Reporting Period: January 1, 2003 through December 31, 2003

Customer	Company	Date of Request	Street	Town	Size (kw)	Generator Type
Commonwealth Energy						
	70	5/24/2003	14.74		1.146	Solar
	70	7/24/2003			1	Solar
		•				
	70	8/11/2003			1.146	Solar
	70	8/11/2003			1.146	Solar
	70	8/11/2003			1.146	Solar
	1				, and the second	
	70	8/12/2003			1.146	solar
	70	0/40/0000			_	_
	70 70	8/13/2003			1	Solar
	70	8/13/2003			1	Solar
	70	0/26/2002			4446	
	70 70	8/26/2003 8/26/2003			1.14-2	Solar
	70	8/26/2003			1.146	Solar
1 1 81	- ,0	0/20/2003			1	Solar
	70	9/3/2003			1 =	Calas
	<del>- ''</del>	JIJIZUUJ			1.5	Solar
	70	9/2/2003			3.5	Solar
		0/2/2000			3.0	Solai
	70	9/16/2003			3	Solar
		0,10,2000				Solai
200	70	9/26/2003			2	Solar
*	70	10/15/2003			1.125	Solar
		· · · · · · · · · · · · · · · · · · ·				Joidi
	70	10/15/2003			1.125	Solar
	70	10/15/2003			1.125	Solar
e.	70	10/15/2003			2.5	Solar
	70	10/15/2003			1.5	Solar
					***************************************	**************************************
	70	10/29/2003		4.7	2.5	Solar
AND THE STATE OF T	70	11/24/2003			1	Solar
Note: The second of the second				4.5		
	70	12/4/2003			2.5	Solar
Booton Felican	70	12/30/2003			1.5	Solar
Boston Edison	- 00	4/40/0000	<u> </u>			
	80 80	1/16/2003 2/1/2003			60	Induction I/C
	80	4/11/2003 4/11/2003			80	Synchronous I/C
	80	5/9/2003			280	Nat Gas Induction
4 1 1 1 1 1 1 1 1	80	5/9/2003			2.376	Solar
talent of the second of the se	80	6/4/2003			2.376 1.19	Solar
	80	7/8/2003			1.19	Solar Photovoltaic Solar
	- 50	17012000		7.1	1.2	Photovoltaic, Solar
					1	
	80	8/11/2003			30	Solar
		3/1/12000			- 30	Julai
	80	8/11/2003		*	1.2	Photovoltaic, Solar
		3, 1 1,2000			1.2	i notovoltalo, solar

Reporting Period: January 1, 2003 through December 31, 2003

				12 8 2		
Control of the second	•					
	80	8/18/2003			8.64	Solar
		····			0.01	00.0.
		ł	Section 1			
	80	9/9/2003			820	
	80	9/12/2003			2.4	Solar
						Internal Combustion
	80	9/29/2003			75	Engine
	···					Internal Combustion
	80	9/29/2003			150	Engine
, 4 . A						Liigiiio
	80	10/15/2003			4.7	Solar
A STATE OF THE STA	80	10/15/2003		7 July 1	2.4	Solar
						Synchronous I/C &
						Internal Combustion
	80	11/4/2003			2,250	Engine
					2,200	Lilgino
	80	11/10/2003			1	Microturbine
					<u> </u>	Internal Combustion
	80	11/10/2003			300	Engine
						Linguite
	80	11/25/2003			75	Natural Gas
	80	12/16/2003			2.3	Solar
Cambridge Electric				.97		00.0
	90	12/5/2002	N. 1. 12.5		35	Fuel Cell
	90	5/11/2003			20	Solar
**	90	6/24/2003			1.8	Photovoltaic, Solar
						T Heteronalo, Colar
						i i
	90	7/3/2003			2.178	Solar
	90	7/8/2003			1.2	Photovoltaic, Solar
	90	8/11/2003			2.4	Solar
				2.5		Synchronous, Gas
7 <u>.</u>	90	11/5/2003			6500	Turbine
		8/26/2003			1,146	Solar
		10/23/2003			16.8	Solar,Wind
		11/14/2003			10	Induction I/C
		12/4/2003			2	Solar
			, , , , , , , , , , , , , , , , , , ,			